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#### ABSTRACT

This study applied a schema-based, social information processing model to examine the development of social cognitive aspects of preschoolers' racial stereotyping and stereotype beliefs (i.e., preschoolers' race schemas). The study examined developmental and individual differences in preschoolers' race schematization (salience of the race dimension in social information processing), same-race and other-race preferences, and memory for racially stereotyped portrayals. Subjects were 27 African American and 38 white preschoolers between 3 and 6 years of age, who participated in 2 interviews. Children's recognition memories for 12 racially stereotyped depictions were assessed. In a separate session, children indicated their peer preferences regarding a series of 28 pairs portraying competing pictures of same-sex African American and white children. Children's response latencies in the peer preference task were used as a measure of race schematization. Results indicated significant differences across several aspects of preschoolers' race schemas. Younger children, white children, and children rated high in race schematization demonstrated significantly greater same-race peer preferences than older children, African American children, and children rated low in race schematization. African American children showed significantly better memories than white children for racial schema-consistent depictions. Results support the application of schema-based social cognitive approaches to examinations of the development of children's racial stereotyping and stereotype beliefs. (MM)



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Race Schemas 1

Differences in aspects of preschoolers' race schema: Race schematization, race-based peer preferences, and memory for racially stereotyped drawings 1

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2

Differences in aspects of preschoolers' race schema:

Race schematization, race-based peer preferences,
and memory for racially stereotyped drawings

Contemporary examinations of the development of stereotyping and stereotype beliefs in children have recently embraced social cognitive, schema-based orientations (viz., Huston, 1983; Katz, 1982; 1983). Although such schema-based models have been applied to investigations of children's gender-role development and gender-typing (e.g., gender schema models; Bem, 1981; 1984; Martin & Halverson, 1981; 1987), these frameworks are only just beginning to be employed in examination of the development of children's racial stereotyping and stereotype beliefs (e.g., Bigler & Liben, 1989; Ramsey & Myers, 1990).

The present study applied a schema-based, social information processing model to examine the development of social cognitive aspects of preschoolers' racial stereotyping and stereotype beliefs (i.e., preschoolers' race schemas). Specifically, the present study investigated developmental and individual differences in preschoolers': (a) race schematization (salience of the race dimension in social information processing), (b) same-race and other-race peer preferences, and (c) memory for racially stereotyped portrayals. Relations among these aspects of preschoolers' race schemas were also examined.

Sixty-five African American (n=27) and white (n=38) preschoolers (39 boys, 26 girls) between three and six years of age (mean=54.30 months) participated in two interviews. Children's recognition memories for 12 racially stereotyped depictions (7 stereotype-consistent, 5 stereotype-inconsistent) were assessed (see Table 1). In a separate session, children indicated their peer preferences regarding a series of 28 pairs portraying competing pictures of same-sex African American and white children. Children's response latencies in the peer preference task were employed as a measure of race schematization.

Results indicated numerous significant differences across several aspects of preschoolers' race schemas (see Tables 2, 3 & 4). Younger children, white children, and high race schematic children demonstrated significantly greater same-race peer preferences than older children, African American, and low race schematic children, respectively. Also, African American children showed significantly better memories than white children for racial stereotype-consistent depic-

tions. Interestingly, high race schematic and African American children exhibited significantly more memory transformations of racial stereotype-inconsistent portrayals into consistent ones than did their low schematic and white counterparts. Low race schematic and African American children exhibited significantly more memory transformations of racial stereotype-consistent portrayals into inconsistent ones than did their high schematic and white counterparts.

Results substantiate the utility of applying schema-based social cognitive approaches to examinations of the development of children's racial stereotyping and stereotype beliefs. Results also align with findings from gender-role development research which has embraced a gender schema approach (e.g., Carter & Levy, 1988; Levy, 1989; Martin & Halverson, 1983; Ruble & Stangor, 1986; Signorella, 1987). Results converge with, and build on, investigations extending cognitive-developmental and schema-based approaches to the study of children's racial stereotyping (e.g., Bigler & Liben, 1989; Ramsey & Myers, 1990; Taylor, 1991).

4

#### References

- Bem, S. L. (1981). Gender schema theory: A cognitive account of sex-typing. <u>Psychological</u> Review, 88, 354-364.
- Bem, S. L. (1984). Androgyny and gender schema theory: A conceptual and empirical integration. In T. B. Sonderegger (Ed.), Nebraska symposium on motivation: Psychology and gender. Vol. 38, Lincoln: University of Nebraska Press.
- Bigler, R. S., & Liben, L. S. (1989). Racial stereotyping and constructive memory in children.

  Poster presented at the biennial meetings of the Society for Research in Child Development.:

  Kansas City, Mo.
- Carter, D. B. & Levy, G. D. (1988). Cognitive aspects of early sex-role development: The influence of gender schemas on preschoolers' memories and preferences for sex-typed toys and activities. Child Development, 59, 782-792.
- Huston, A. H. (1983). Sex-typing. In E. M. Hetherington, (Vol. Ed.) & P. H. Mussen, (Series Ed.), Handbook of child psychology: Socialization, personality, and social development. New York: Wiley.
- Katz, P. A. (1982). Development of children's racial awareness and intergroup attitudes. In L. G. Katz (Ed.), Current topics in early childhood education, Volume 4. Norwood, NJ: Ablex.
- Katz, P. A. (1983). Developmental foundations of children's gender and racial attitudes. In R. L. Leahy (Ed.), The child's construction of social inequality. New York: Academic.
- Levy, G. D. (1989). Developmental and individual differences in preschoolers' recognition memories: The influences of gender schematization and verbal labeling of information. Sex Roles, 21, 305-324.
- Martin, C. L., & Halverson, C. F. (1981). A schematic processing model of sex-typing and stereotyping in children. Child Development, 52, 1119-1132.
- Martin, C. L., & Halverson, C. F. (1983). The effects of sex-typing schemas on young children's memory. Child Development, 52, 1119-1134.



5

- Martin, C. L., & Halverson, C. F. (1987). The roles of cognition in sex role acquisition. In D. B. Carter (Ed.), <u>Current conceptions of sex roles and sex-typing</u>: <u>Theory and research</u>. New York: Praeger.
- Ramsey, P. G., & Myers, L. C. (1990). Salience of race in young children's cognitive, affective, and behavioral responses to social environments. <u>Journal of Applied Developmental</u>

  <u>Psychology</u>, 11, 49-67.
- Ruble, D. N., & Stangor, C. (1986). Stalking the elusive gender schema: Insights from developmental and social psychological analyses of gender schemas, <u>Social Cognition</u>, 4, 227-261.
- Signorella, M. L. (1987). Gender schemata: Individual differences and context effects. In L. S. Liben & M. L. Signorella (Eds.), <u>Children's gender schemata</u>. <u>New Directions in Child Development</u>. 38. San Francisco: Jossey-Bass.
- Taylor, A. R. (1991). Same-race versus cross-race acceptance and friendship as predictors of black and white children's self concept. Poster presented at the biennial meetings of the Society for Research in Child Development.: Seattle, Wa.

6

#### Table 1

### Description of recognition memory drawings (N=12)

#### Stereotype consistent drawings (n=7)

- 1) African-American male server & white male customer
- 2) African-American male basketball player & white male head coach
- 3) African-American male robber & white male police officer
- 4) African-American woman restaurant worker & white woman supervisor
- 5) African-American woman purse snatcher & white woman victim
- 6) White male military general & African-American male military private
- 7) White male computer analyst & African-American male janitor

#### Stereotype inconsistent drawings (n=5)

- 1) African-American male business person & white male beggar
- 2) African-American male client & white male door person
- 3) African-American male riding in limousine & white male riding city bus
- 4) African-American male swimmer & white male coach
- 5) White male acting lazy (sitting) & black male active (riding bicycle)



Race Schemas

Table 2

Means and Standard Deviations of Variables (N=65)

	<del>-</del> '	
VARIABLE	MEAN	S.D.
Age in months	54.30	11 🕾
Interval between interviews (in days)	3.03	1.28
Race Schematization		
Facilitative score <sup>a</sup>	-0.03	0.27
Inhibitory score <sup>b</sup>	0.37	0.54
Peer Preferences		
Same-race peer preference	12.51	5.96
Other-race peer preference	13.40	5.62
% Accurate Memory:		
Stereotype consistent items	80.79	21.67
Stereotype inconsistent items	80.34	23.54
% Inaccurate Memory:		
Consistent to inconsistent items	67.24	31.72*
Inconsistent to consistent items	71.92	27.29*

<sup>&</sup>lt;sup>a</sup> A <u>negative</u> Facilitative score indicates a high degree of schematization, whereas a <u>positive</u> score indicates a low level of schematization.

**b** A <u>positive</u> Inhibitory score indicates a high degree of schematization, whereas a <u>negative</u> score indicates a low level of schematization.

Table 3

Mean accurate memory, inaccurate memory, and peer preference scores as a function of children's age group, race, race schematization, and stereotype beliefs

		A	ge Group	Race	ace	
		Young	Old	AfrAmer.	White	
	<u>n</u> =	33	32	27	38	
Accurate memory (%)						
Ster. cons.		77.91	83.76	87.61	75.94	
Ster. incons.		75.18	85.67	83.05	78.42	
Inaccurate Memory (%)						
Cons. to incons.		68.44	75.51	74.04	64.66	
Incons. to cons.		65.10	68.47	82.14	61.58	
Peer Preference						
Same-Race		12.85	12.16	9.93	14.34	
Other-Race		11.69	15.15	13.03	13.66	
	-		Race Schematization			
		E	acilitative score	Inhi	Inhibitory score	
		Low	High	Low	High	
<b>n</b> =		30	35	36	29	
Accurate memory (%)						
Ster. cons.		81.89	79.85	81.86	79.46	
Ster. incons.		81.37	79.47	81.71	78.64	
Inaccurate Memory (%)				- 1 - 1 - 2 - 2 - 1 - 1 - 1 - 1 - 1 - 1		
Cons. to incons.		79.67	73.38	70.31	73.93	
Incons. to cons.		62.60	71.61	67.60	65.67	

#### Table 3 continued

### Race Schematization

	<u>Facilita</u>	Inhibite	Inhibitory score	
	Low	<u>High</u>	Low	High
<u>n</u> =	30	35	36	29
Peer Preference				
Same-Race	11.26	13.57	10.72	14.72
Other-Race	14.07	12.83	13.56	13.21

Race Schemas 10

Table 4

Means associated with significant two-way interactions among children's race, sex, and age on accurate memory, inaccurate memory, and peer preference scores

			Race		
		Afr. Amer.		White	
Sex		Boys	Girls	Boys	Girls
	<u>n</u> =	19	8	19	19
Accurate memory (%)					
Ster. cons.		87.09	89.09	75.19	76.69
Ster. incons.		80.10	91.47	82.10	74.73
Peer Preference					
Same-Race		9.15	12.14	15.57	13.11
Other-Race		12.15	15.57	12.42	14.89
		Age Group			
			Age	Group	
		Yeun		Group Older	
Race		Yeun Afr, Amer		~	<u>White</u>
Race	<b>n</b> =		ger	Older	
Race Accurate memory (%)	<b>n</b> =	Afr. Amer.	ger White	Older Afr. Amer.	White
	<b>n</b> =	Afr. Amer.	ger White	Older Afr. Amer.	White
Accurate memory (%)	<u>n</u> =	Afr. Amer.	ger White 17	Older Afr. Amer. 11	White 21
Accurate memory (%) Ster. cons.	<b>n</b> =	Afr. Amer. 16 85.68	White 17 70.59	Older Afr. Amer. 11 90.41	White 21 80.27
Accurate memory (%) Ster. cons. Ster. incons.	n =	Afr. Amer. 16 85.68	White 17 70.59	Older Afr. Amer. 11 90.41	White 21 80.27